



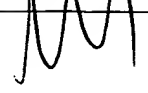
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,039	06/28/2001	Yukihisa Takeuchi	939 019	5051
25191	7590	12/01/2004	EXAMINER	
BURR & BROWN PO BOX 7068 SYRACUSE, NY 13261-7068			KIM, CHRISTOPHER S	
			ART UNIT	PAPER NUMBER
			3752	

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/806,039	Applicant(s) TAKEUCHI ET AL. 	
	Examiner Christopher S. Kim	Art Unit 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Amendment filed August 5, 2004 is acknowledged.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Drawings

3. The drawings were received on February 13, 2004. These drawings are unacceptable. Figure 3 shows a base frame 13c configuration which is not support by the disclosure as originally filed.
4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "vibration source is fixed to a fixation section, and at least another portion of said vibration source is in contact with said liquid sump" recited in claim 11 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

5. Claims 9, 10 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Yao et al. (4,667,877).

Yao et al. discloses a liquid-drop spraying device comprising: a liquid sump 20 including an outlet 22 and inlet 19; a common fluid supply passage 11; a vibration source 16.

6. Claims 9-14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Perduijn (4,418,354).

Perduijn discloses a liquid-drop spraying device comprising: a liquid sump 3 including an outlet 15 and inlet 17; a common fluid supply passage 19; a vibration source 25; a fixation member 39, 43.

Response to Arguments

7. Applicant's arguments filed August 5, 2004 have been fully considered but they are not persuasive.

Applicant argues that Figure 3, filed February 13, 2004, does not contain new matter because paragraph 0029 of the substitute specification recites the vibration source 13 being separately formed and fixed partially on a base frame, the lower surface of which is the movable section of the vibration source 13. The substitute specification nor the originally filed specification discloses the vibration source being attached to the underside of a base frame.

Applicant argues that Yao does not disclose "each pressure chamber including an outlet and an inlet in communication with a common fluid supply passage via an inlet

passage.” Applicant’s specification, in paragraphs 28 and 29, which are directed to Figure 3, discloses pressure chambers 10, outlets 11, inlets 12, passage 20.

Applicant’s recitation “common fluid supply passage” appears to be directed to passage 20. The specification does not appear to disclose an inlet passage. Yao’s common fluid supply passage 11 includes the inlet 15. Therefore, Yao’s pressure chamber (chamber of 20) includes an outlet 22 and inlet 19 in communication with a common fluid supply passage 11 via (by way of) an inlet passage 15. The pressure chamber inherently communicates with the common fluid supply passage by way of the inlet passage since the inlet passage is part of and connected to the common fluid supply passage. If the applicant is arguing that the inlet passage must be located between the pressure chamber and the common fluid supply passage, the recitation “inlet passage” would either be a double inclusion of the “inlet” or the “inlet passage is inherent in Yao because the common fluid supply passage is connected to the pressure chambers.

Applicant argues that Perduijn does not disclose “a single vibration source comprising a single vibration transmission surface, the entirety of which is flat, that changes the volume of at least two of the pressure chambers of the liquid sump.” Perduijn discloses a single vibration source 25 comprising a single vibration transmission surface, the entirety of which is flat, that changes the volume of at least two of the pressure chambers of the liquid sump 3. Claim 9 utilizes the transitional phrase “comprising” and does not exclude a “vibration source” beyond the “single vibration transmission surface, the entirety of which is flat.”

Applicant argues that Perduijn does not disclose an outwardly projecting thin wall. Perduijn discloses a sump 3 which has a cylindrical wall having a curvature similar to applicants outwardly projecting thin wall 10b of figure 2.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. Kim whose telephone number is (703) 308-8336. The examiner can normally be reached on Monday - Thursday, 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on (703) 308-1272. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3752

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher S. Kim
Primary Examiner
Art Unit 3752

CK